UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/834,785	04/13/2001	Edward A. Hubbard	UNTD:021	8392

29444	7590	12/16/2005

KELLY K. KORDZIK
WINSTEAD SECHREST & MINICK P.C.
PO BOX 50784
DALLAS, TX 75201

EXAMINER
DALENCOURT, YVES

ART UNIT	PAPER NUMBER
2157	

DATE MAILED: 12/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
Office Action Summary	09/834,785	HUBBARD, EDWARD A.
	Examiner	Art Unit	
	Yves Dalencourt	2157	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>26 September 2005</u>.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>29-54</u> is/are pending in the application.

   4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>29-54</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

   Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

   Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

   a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

   * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
   Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
   Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

In view of the Appeal Brief filed 09/26/2005, PROSECUTION IS HEREBY

REOPENED. New grounds of rejection set forth below.

To avoid abandonment of the application, appellant must exercise one of the

following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply

under 37 CFR 1.113 (if this Office action is final); or,

(2) initiate a new appeal by filing a notice of appeal under 37 CFR 41.31 followed

by an appeal brief under 37 CFR 41.37. The previously paid notice of appeal fee and

appeal brief fee can be applied to the new appeal. If, however, the appeal fees set forth

in 37 CFR 41.20 have been increased since they were previously paid, then appellant

must pay the difference between the increased fees and the amount previously paid.

Claim Objections

Claim 42 is objected to because of the following informalities: It is suggested to

delete " – " (claim 42, line 12). Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of
making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the
art to which it pertains, or with which it is most nearly connected, to make and use the same and shall
set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 29 and 42 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Regarding claims 29 and 42, the limitation of "configuring the client agent program to have a software-based (NAS) component and to assess unused or under-utilized resources in selected distributed devices from the multiplicity distributed devices " is not discribed in the specification as claimed. Applicant discloses " In addition, incentives may be based upon the capabilities of the client systems, based upon a benchmark workload that provides a standardized assessment of the capabilities of the client systems, or based upon any other desired criteria. " in paragraphs [0076]. The examiner is unable to find where exactly such limitation is described in the specification. Therefore, one skilled in the art would not how to make and/or use the invention as claimed.

Claims 30 – 41 and 43 – 54 are necessarily rejected as being dependent upon the rejection of claims 29 and 42.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

invention was made to a person having ordinary skill in the art to which said subject matter pertains.
Patentability shall not be negatived by the manner in which the invention was made.

Claims 29 - 54 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Lee et al (US 6,601,101; hereinafter Lee) in view of Richter et al (US 2002/0194251 a1).

Regarding claims 29 – 30 and 42 - 43, Lee teaches a method and system for

providing network attached storage (NAS) services (col. 1, lines 15 – 22), which

comprises the steps of configuring a distributed processing system by coupling a

multiplicity of distributed devices using a network, wherein each of the distributed

devices is enabled by a client agent program to process workloads for the distributed

processing system (col. 1, lines 24 - 41); generating a representation by the software-

based NAS component that the selected distributed devices are each NAS devices

having an available amount of storage resources selected from the unused and under-

utilized storage resources (col. 2, lines 35 - 47); and processing data storage and

access workloads for the distributed processing system by accessing data from or

storing data into portions of the available amounts of storage resources of the selected

distributed service to provide the NAS services to client devices coupled to the network

(fig. 3; col. 6, line 61 through col. 7, line 58; col. 22, lines 12 - 30).

Lee teaches substantially all the limitations in claims 29 and 42, but fails to

specifically teach the step of configuring the client agent program to have a software-

based (NAS) component and to assess unused or under-utilized resources in selected

distributed devices from the multiplicity distributed devices.

However, Richter teaches, in the same field of endeavor, systems and methods

for resource usage accounting in information management environments, which

comprises teach the step of configuring the client agent program to have a software-based (NAS) component and to assess unused or under-utilized resources in selected distributed devices from the multiplicity distributed devices (paragraphs [0023], [0380], [0385]-[0387]).

Thus, it would have been obvious to one of ordinary skilled in the art at the time the invention was made to modify the teachings of Lee by incorporating the step of configuring the client agent program to have a software-based (NAS) component and to assess unused or under-utilized resources in selected distributed devices from the multiplicity distributed devices as evidenced by Richter for the purpose of tracking resource utilization in a network attached storage, thereby avoiding over/under utilization of one or more resources within the information management environment.

Regarding claims 31 and 44, Lee and Richter teach all the limitations in claims 29 and 42, and Lee further teaches that the client agent program enables at least one of the selected distributed devices to function as a location distributed device to store location information for data stored by the selected distributed devices (col. 4, lines 39 - 65).

Regarding claims 32 and 45, Lee and Richter teach all the limitations in claims 31 and 44, and Lee further teaches the method and system of enabling the location distributed device to receive data storage and access requests from the client devices coupled to the network and to direct the client devices to the selected distributed devices storing the requested data (col. 7, lines 11 – 15; Lee discloses the first device

determines that another device in the cluster is better suited to handle the client request).

Regarding claims 33 and 46, Lee and Richter teach all the limitations in claims 31 and 44, and Lee further teaches the method and system of managing the NAS services at least in part utilizing at least one centralized server system (col. 4, lines 19 – 23; Lee discloses that it is particular useful when a server is a virtual IP address for multiple devices such as NAS).

Regarding claims 34 and 47, Lee and Richter teach all the limitations in claims 31 and 44, and Lee further teaches the method and system, wherein the centralized server system downloads the NAS component to the client agent programs in the distributed devices (col. 19, lines 37 – 50; Lee discloses a TCP handoff involves transferring TCP state information from the server to a disk).

Regarding claims 35 and 48 Lee and Richter teach all the limitations in claims 33 and 46, and Lee further teaches the method and system, wherein the centralized server system stores location information for data stored in the selected distributed devices and at least in part directs the client devices to the distributed devices storing the requested data (col. 7, lines 11 – 15; Lee discloses the first device determines that another device in the cluster is better suited to handle the client request).

Regarding claims 36 and 49, Lee teaches the method and system of claims 35 and 48, which further comprising utilizing the centralized server system to receive data storage and access requests from the client devices and to route data storage and access workloads to the selected distributed devices based in part upon individual

capabilities of the selected distributed devices, wherein the individual capabilities are stored in a capabilities database coupled to the centralized server system ((col. 5, lines 4 – 17; col. 7, lines 35 – 58; col. 19, lines 15 – 67; col. 20, lines 1 – 26; Lee discloses load balancing, which refers to networked devices which can share a work load, for instance two or more servers).

Regarding claims 37 and 50, Lee teaches the method of claims 29 and 42, wherein the network is the Internet (col. 2, lines 22 – 35; col. 4, lines 32 – 35).

Regarding claims 38 and 51, Lee and Richter teach all the limitations in claims 31 and 44, and Lee further teaches the method and system, which further comprising managing storage resources for the selected distributed devices using a storage priority control that facilitates full use of the available amounts of storage resources (col. 2, lines 7 – 19; col. 7, lines 35 – 58; Lee discloses that when the first device is a load balancing device, satisfactory measures for load balancing may include traffic through the switch, reported workload or available capacity of alternate devices, or analysis of the services being requested).

Regarding claims 39 – 41 and 52 - 54, Lee and Richter teach all the limitations in claims 29 and 42, and Richter further teaches the method and system, wherein the storage priority control comprises a parameter selectable through one of the client devices (paragraphs [0035], [0127], [0261], and [0367]); wherein the storage priority control comprises storage priority level schemes that prioritize data storage and deletion (paragraphs [0035], [0127], [0261], and [0367]); and wherein the storage priority control

comprises a priority marking directly given to data or files (paragraphs [0035], [0127],

[0261], and [0367]).

Thus, it would have been obvious to one of ordinary skilled in the art at the time

the invention was made to modify the teachings of Lee by incorporating the steps

recited above for the purpose of employing deterministic information management,

thereby providing higher overall multi-processing system performance efficiency

.

Conclusion

The prior art made of record and not relied upon is considered pertinent to

applicant's disclosure.

Collins et al (US 20020188733) discloses a method and apparatus to manage

transactions at a network storage device.

Clark et al (US Patent Number 4,987,533) discloses a method of managing data

in a data storage hierarchy and a data storage hierarchy therefor with removal of the
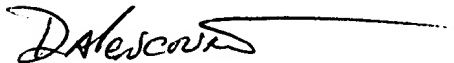
least recently mounted medium.

Contact Information

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Yves Dalencourt whose telephone number is (571) 272-

3998. The examiner can normally be reached on M-TH 7:30AM - 6: 00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Ario Etienne can be reached on (571) 272-4001. The fax phone number for

the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

Yves Dalencourt

December 2, 2005